Effect of the doctor's personality on his style of practice

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A great many patients have psychiatric disorders. A survey was carried out of 171 general practitioners distributed throughout England and Wales with an aggregate practice population of 382,829. For one year the doctors kept an account of their contact with patients, recording the nature of the illness. The "patient consulting rate" was the number of patients consulting for the first time during the survey year per 1,000 on the lists of doctors. For psychiatric ailments this was 50 per 1,000. The "consultation rate" was the number of separate consultations per 1,000 on the lists. The figure for psychiatric disorders was 187.4 per 1,000. The only other specific conditions with patient consulting rates higher than 50 per 1,000 were acute nasopharyngitis, rheumatic disorders, and bronchitis.

When a single practice is inspected a similar impression is obtained, that psychiatric disorders loom large. In a London suburban general practice eight per cent of adult attenders had psychological symptoms at some time during the year; inclusion of all patients who had an illness without obvious physical cause would have inflated the estimate to 38 per cent. With the addition of patients with 'psychosomatic' or 'stress' disorders the rate would have risen to more than 50 per cent. This figure would still have left out those patients whose psychiatric disability was expressed as an elaboration of the symptoms of established physical disease (Shepherd *et al.* 1959).

The question arises whether doctors recognize their patients' ailments when these are psychological. It has often been confirmed in studies of general practitioners that they fail to appreciate important details in the patient's domestic background or personality (Peterson *et al.* 1956, Clute 1963, Priest 1962). The possibility needs to be explored that general practitioners miss these aspects of illness because social and personality factors received too little emphasis during their training at medical school. A time study of medical teaching-rounds showed that medical-school teachers minimize the personal aspects of patients (Payson and Barchas 1965).

Representative samples of medical rounds were monitored by means of a stopwatch on the medical services of four different hospitals. The rounds were found to be conducted in a fairly similar manner on all four services. There was little emphasis on the bedside demonstration of individual or personal aspects of medical care, much less than most physicians realized. In their teaching physicians gave little demonstration how the patient should be approached, or how the doctor–patient relationship should be established. They placed great emphasis on basic scientific investigation; most time was spent discussing physical factors or theoretical matters. Pathophysiology was given time rather than interviewing or bedside examination. Bedside teaching was not directed toward thorough patient care, whatever the teaching physicians may have intended. Judging from the performance of medical teachers at the bedside, future doctors are trained to attend most to laboratory and other non-personal techniques of patient management.

Recognition of psychological illness by general practitioners is related to the number of years since qualification; young doctors identify a higher proportion of their practice populations as psychiatric cases than do their older colleagues (Mowbray *et al.* 1961). Do younger doctors carry out more home visiting than their older colleagues, and thereby gain additional information about patients' family background that is not explicit in

the consulting room? In fact, the frequency of home visiting in some countries, especially the United States, appears to be falling progressively, so that in American cities at present only about one medical service in 20 is rendered in the patient's home (New Materia Medica 1963). In Britain the ratio of consulting-room attendances to home visits varied from 0.7:1 to 6.7:1 in 30 general practices (Taylor 1954), indicating that visits to patients in their homes is a highly variable matter and dependent on the personal professional style of individual doctors.

Other evidence that raises awkward issues is the extent that doctors vary in the number of psychiatric patients they have on their lists. This may indicate that patients show selectivity in their choice of general practitioners: those with emotional disorders may seek out the practitioners known to be sympathetic or skilful in handling emotional illnesses. Rawnsley and Loudon (1962a) found that the rate of referral of patients directly to psychiatric services showed substantial variation among six practices, so that, for females, the highest rate (36.8) was almost twice the total average (19.4) and more than three times the lowest (10.8). They questioned whether one reason for this diversity of rates could be the selective recruitment of psychiatric cases to general practitioners viewed by the population as specially competent of sympathetic in handling psychological problems. But this hypothesis was not supported by evidence available from their material. It may be supposed that doctors differ in the degree of clinical severity which they require before referring a patient for psychiatric opinion; however, this also did not appear to be the case.

One general practitioner has claimed that the doctor may be implicated in a complex selection process initiated by patients. He estimated that 12 per cent of a group of ascertained neurotic patients in his general practice had joined the list because of his known interest in neurosis (Ryle 1960), and supported the hypothesis that some doctors may selectively attract psychiatric patients. If such recruitment of patients on the basis of their beliefs in a doctor's special interest or aptitude does operate, it could explain the substantial differences in referral rates for different doctors (Rawnsley and Loudon 1962a). Also, patients may choose a doctor because of his age, sex or personality.

As we have seen, some doctors refer more of their psychiatric patients for psychiatric opinion or treatment than do other doctors. The rhyme or reason in the decision-making procedure of the practitioner is not apparent: those he sends for psychiatric opinion or treatment do not differ in any obvious way from those not sent. In a series of non-referred patients who were recognized by their general practitioners as having a psychiatric disorder, two psychiatrists found clinical conditions as severe as those they customarily saw in psychiatric outpatient clinics. Why had these patients not been referred? The general practitioners concerned were unable to say why these patients were not sent for psychiatric opinion, while other similar patients were referred (Kessel 1960).

Some of the factors affecting referral rate are tangible and practical. The nearer the doctor's surgery is to a psychiatric clinic, the higher his referral-rate (Hare 1959). But highly personal attributes of the doctor also affect referral rate. From an analysis of letters referring patients to a psychiatric clinic, the conclusion was reached that variations in the type and number of referrals made by differing general practitioners could be due to the widely differing attitudes to psychiatry on the part of the practitioners (Mowbray *et al.* 1961).

There was a wide range in the number of patients referred for psychiatric treatment from six general practices in a South Wales mining valley (Rawnsley and Loudon 1962b). This could not be accounted for by social and demographic variations in the populations of each practice, nor by the fact that there were more psychiatric patients in some practices, nor was it related to variations in clinical severity, or in diagnoses of the patients

referred. Three of the eight doctors interviewed said that pressure from relatives influenced their decision to make a referral. The doctor's attitude to psychiatry and psychiatrists was a powerful determinant of the number of patients he referred.

The suspicion and scepticism about psychiatry begins early. Many medical students view psychiatrists as emotionally unstable and as confused thinkers (Bruhn and Parson 1964); it is less common for students planning to enter psychiatry, and more common for students not electing psychiatry as a specialty, to perceive the psychiatrists as emotionally disturbed.

Psychiatry does not have high prestige among medical school departments. Medical students were found to rank psychiatry lowest among a group of medical specialties (Parker 1958). In another study both students and teachers were found to rank psychiatry low among the branches of medicine, only dermatology held in lower prestige (Reader 1958). When students were asked to rank specialties as they might be assigned 'by the profession of medicine' the lowest status was accorded to psychiatry (Merton *et al.* 1956).

Few senior medical students in Britain select psychiatry as their preferred specialty. Among 2,234 medical students in five British medical schools, seven per cent expressed a career preference for psychiatry (Martin and Boddy 1962). In a graduating class at Edinburgh nine per cent of pre-registration doctors were seriously considering a psychiatric career (Walton, Drewery and Carstairs 1963).

Any investigation into the effects of personality on career choice and professional orientation will give account of only an aspect of career preference. Quite extraneous factors may prove decisive. Among U.S. students in their senior year at medical school, those who chose general practice more often reported themselves as deeply in debt than those who planned further postgraduate study (Hutchins 1962). But any knowledge gained about the effect of personality on career preference may throw useful light on recruitment in the different branches of medicine. An investigation of doctors after a year of internship (Shumacher 1964), found that those in surgery were differentiated on objective testing by a 'need to dominate', characterized by a striving to be a leader and to be regarded by others as such, and by a tendency to tell others how to act and to direct their activities. The doctors entering general practice were found to place high value on practical application of knowledge; they did not have as great a need to exercise leadership as those of their fellows who became specialists or entered academic careers. Those entering psychiatry formed the most unique group. Relative to the other groups studied, they were characterized by high theoretical and artistic interests, low scores on the compulsiveness dimension, and moderate dominance need.

There are important differences in behaviour pattern among doctors in any particular branch of medicine. Among general practitioners one of the most striking discrepancies is in their referral habits. Although some do so more than others, referral of psychiatric patients not to psychiatrists, but to medical and surgical clinics is a widespread practice. General practitioners appear to send only a tenth of their psychiatric patients to psychiatrists (Shepherd *et al.* 1960). It has been found that a large proportion of patients at general medical and surgical clinics suffer primarily from psychiatric disorders (Shepherd *et al.* 1960). There may be a number of reasons for such referral. The general practitioner may be unable to diagnose psychiatric disorder, or he may fear that the patient would object if referred straight to a psychiatrist; the doctor may act in the hope that the patient will benefit if assured by a specialist that no organic disease is present.

General practitioners appear to refer selectively young people rather than older people for psychiatric treatment, thus there is a striking difference in the age distribution of neuroses in hospital and general practice (Kessel and Shepherd 1962). The prevalence

of neurosis in general practice increases with age from youth to early adulthood and shows no subsequent decline; the prevalence of neurosis in psychiatric hospital patients (in-patient and outpatient) shows a marked decline after the early adult peak.

It is perhaps not surprising, when the varying psychological tolerance of general practitioners is considered, that there appears to be an increasing demand among patients for the right of self-referral to the psychiatrist; in student health services, for example, individuals are offered direct access to a psychiatrist (Reid 1954). Self-referral, however, is not approved professionally and, usually psychiatrists will refuse to see those patients purporting that their doctor has a low opinion of psychiatrists and refuses to arrange referral. Some tense dilemmas occasionally arise, for instance when a pregnant woman believes termination of pregnancy should be considered on psychiatric grounds but her doctor demurs.

We may begin to suspect that training is very important (medical educators like to suppose so), but the suspicion grows that medical teaching has varying effects, in part determined by the personality and attitudes of different medical students. If we ask doctors whether they were already interested in psychiatry when at medical school, some say they were, but some say they only became interested later on (Walton 1965). When this difference is pursued further, the obvious is revealed. The doctors who became interested only after leaving medical school indicate that they got curious only when confronted by actual problems presenting in practice, which implicated their own patients. It follows that, if teachers want to interest those medical students who are antipathetic to psychological factors in illness, students must be given responsibility for actual patients confronting them with real problems, which they can then work out in terms of the individual patient in whose future they have some professional stake.

But if we look at what teachers of psychiatry want to provide for medical students, it may be woefully apparent that their aims are irrelevant to the needs of the student whose personality is such that he recoils from emotional manifestations of illness.

The teaching orientation of lecturers in psychiatry

What would teachers of psychiatry consider the most important aspects of their subject which must be taught to medical students, to form an essential component of an adequate general medical training?

This was tested by asking all the teachers in the department of psychiatry at Edinburgh four open-ended questions. Their replies were then analyzed and sorted. The most important finding is that teachers vary greatly in their goals. The teachers were found to rank themselves in a pattern required for Guttman scales (Guttman 1950). This grading technique allows proportionate representation of attitudes in a sample to be expressed as a continuum. First the relevant attitudes are measured by questionnaire methods, and then the individuals are ranked. If their replies fit the requirements of a Guttman scale, they form a series in which a person fitting in one category will also fit in all the categories below it in the series. A man who is six feet tall is also five, four, three, etc. feet tall; a man who is five feet tall is also four, three, etc. feet tall. The statistical requirement for a Guttman scale is 90 per cent reproducibility.

1. The teachers of psychiatry at Edinburgh (Walton and Drewery 1964) were most uniform in their belief that systematic clinical psychiatry should be taught, *i.e.* the symptoms, syndromes and classes of mental illness. This is the aspect of psychiatric knowledge which may be labelled the 'clinical informational' area. The teachers, 18 of them psychiatrists and three clinical psychologists, were unanimous in their view that medical students must be taught factual knowledge about such basic clinical phenomena in psychiatry. This area is the one most resembling general medicine in conceptual and technical respects. Some teachers, the *Category 1* lecturers, specified

that this is the exclusive psychiatric teaching which they wish to see provided, systematic clinical information.

2. The second teaching goal, advocated by 86 per cent of the lecturers, was the 'interpersonal relationships' goal, aiming to teach students about psychological processes (sometimes labelled psychodynamics) and the importance of interpersonal relationships in personal adjustment. This too was a teaching goal advocating a certain type of information; it was firmly regarded as a necessary component of training needed by medical students. *Category 2* lecturers will teach only these two informational aspects of clinical psychiatry, the psychodynamic and the systematic areas.

3. The third goal advocated was to teach students about the sciences basic to and related to psychiatry, such as psychology, anthropology and sociology; half the lecturers wanted these behavioural sciences taught, with scientific method itself, so that students could learn how to read reports in the medical literature with appropriately critical understanding.

4. The type of teaching least often mentioned, considered a necessary part of undergraduate psychiatric training by under a quarter of the lecturers, was psychotherapy. This was defined as the technique by which patients can be aided to perceive their own maladjusted behaviour patterns, and to realize steps open to them for altering such self-defeating attitudes or actions. This fourth teaching aim was the behaviour-modifying goal, calling for the teaching of interview techniques or psychotherapy.

The investigation showed that lecturers of psychiatry can be ranked in terms of the range of teaching goals they consider important. *Category 4* lecturers would teach systematic psychiatry, psychodynamic psychiatry, behavioural sciences and psychotherapeutic techniques. *Category 3* lecturers would not set out to teach interview techniques, but this technical area is the only one of the four they overlook. They are in estimable company, for some leading psychiatric educators have stated that medical students cannot attempt to learn psychotherapy because of their own immaturity and because of possible harm patients may suffer in the process. Another reason for hesitating to teach interview methods is the theoretical and technical confusion still prevalent in this important area of psychiatry; until psychotherapy is better conceptualized and its component procedures more clearly differentiated, there will be vagueness and uncertainty in what is taught. Nevertheless, although only the smallest category of teachers of psychiatry propose to teach interview procedures to medical students these students themselves, as will be shown below, expect to be taught psychological treatment methods, and in this requirement are at some variance with the great majority of their psychiatric teachers.

Analysis of the appointments held by lecturers showed that the teachers who are informational in their orientation, wanting to instruct students only about clinical and psychodynamic psychiatry, are clinicians primarily, whose appointment is in the National Health Service. The lecturers who propose behavioural science teaching and instruction in interview procedures significantly often hold university appointments (Chi-square <3.82; d.f.$=1$; $p=0.05$).

Psychological attitudes of pre-clinical students

Medical students about to start their clinical studies have a fair measure of respect for psychiatry. A class of third year medical students were asked to state the future they favoured for themselves. Half the students, not unexpectedly, wanted to be consultants in general medicine; over a quarter wanted to be general practitioners. A fifth of the class intended to become surgeons. A tenth were considering a career in psychiatry. A psychiatric career was more favoured than a career as research scientist, or in pathology, radiology or anaesthetics.

Undergraduate psychiatric instruction does not aim to make psychiatrists of students. At this stage of their professional training, students are almost unanimously of the opinion that the doctor's responsibility includes advising patients about psychological problems. They also hold strongly that the doctor should attend to patients' sexual complaints and be trained to advise about malfunction in this area.

These pre-clinical students also hold that the doctor's competence should include ability to handle marital problems, difficulties parents experience in bringing up their children, and other family problems as well. (The students did not accept, however, that doctors have to be concerned with career worries of patients or their problems in employment). The students may have been surprised had they learned, at that stage, that half of their future teachers of psychiatry considered instruction in psychology or sociology unnecessary, and that less than a quarter of their psychiatric lecturers proposed teaching them interviewing techniques.

Graduating students

The evidence obtained from a final year class, both at the time of graduation and a year earlier when they had been engaged on their study of psychiatry, showed that while a section of the students are responsive to and interested in psychological and social aspects of medicine, a substantial proportion is not (Walton, Drewery and Carstairs 1963). Half the graduating class described themselves as more interested in organic aspects of illness. The students who chose this self-description were labelled, for descriptive brevity, 'physical'.

The half of the graduates who conveyed that they were as interested in psychological as in organic factors were considered psychological in orientation, or ' affective '. That this self-description is consistent can be shown by the way these two attitudes relate with psychiatric career choice. Students who consider doing psychiatry are 'affective'; on the other hand, to a highly predictable degree physical students will be opposed to consideration of a psychiatric career (Tau <0.56; unit normal deviate $=6.16$; $p=0.000000001$).

The relevance of this attitude difference in a class of graduating doctors is that to a predictable degree affective graduates will describe themselves as interested in psychiatric patients, while physical graduates will comprise the substantial portion of the class, almost a quarter, who convey that they are not interested in psychiatric patients. This means that on the basis of self-description physical students will react with lesser concern to any patient whose symptoms convey that there is a psychological component in the illness. These young doctors conveyed clearly that the more obtrusive the psychological component in a patient's illness, the less inclined were they to view the patient with acceptance. Almost all the graduates said they were prepared to treat psychosomatic patients, *i.e.* those with physical illness in which psychological factors also played a part. Regarding neurotic patients, as many as one quarter of the graduates did not wish to treat patients with such minor psychiatric disorders, while another quarter were uncertain whether they would be prepared to accept cases of psychoneurosis. When it came to the major psychiatric disorders, only 27 per cent of the graduates signified that they would be prepared to treat psychotic patients. It was clear that these young doctors perceived psychoses as outside their professional scope. The doctors who were prepared to treat psychotic patients in later practice significantly more often described themselves on the questionnaire item as 'affective'.

A factor analysis of medical graduates

The voluminous data available about the class of graduating students was analyzed by using a form of interperson factor analysis, devised by Sandler (1958) and named 'delegate analysis'. Every student was measured on 66 variables. When these values

for each of the 112 graduates were correlated with the corresponding findings in all the other students, four hypothetical students were obtained, 'delegates' who served to summarize the factorial findings (Walton, Drewery and Philips 1964). For each delegate there is theoretically a precisely equal but opposite delegate, a mirror-image. My purpose is not to describe this investigation in detail, but to draw from it the evidence relevant to psychological orientation.

Of the four typical graduates, two were organic and two were psychological in orientation.* Within each pair basic differences were apparent, as a brief summary of the cluster of variables that define each delegate will show.

1. The first organically-orientated graduate was labelled *Adequate*, because this composite student considered he had enough time for his studies and still time to spare for his family and friends. When engaged in studying psychiatry he experienced no difficulty; however, he did not examine for himself any patients with psychological illness. He considers himself well able to distinguish psychological from organic complaints. He does not want to treat psychoneurotic patients in his practice, and still more emphatically he does not want to treat psychotic patients. He did not rate his psychiatric ability highly, but his negative attitude is not because he reacts unfavourably to neurotic, hypochondriacal or psychosomatic patients. He is not disturbed that patients will attempt to involve him emotionally, nor that much of the illness he will have to treat will be functional. He is not prone to worry: he was not inclined to worry over his degree examinations; perhaps rather cynically, he considers that examiners merely want back from candidates a summary of the teachers' views. He tended not to be a local man, but had come some distance from his home to attend the medical school, usually from England but sometimes from overseas.

This first organically-orientated student is thus realistic, well-adjusted and calm. He has no problems in his personal relationships. He is not interested in emotional aspects of illness, and this is not because he reacts subjectively against emotionally-disordered patients. He does not intend to treat non-organic illness in later practice.

2. The second organically-orientated student is very different, showing that simple categorization of medical students is not valid. He specifies that his professional attitude is the physical one. He has been labelled *Limited* because he describes himself as reacting very unfavourably to a large range of patients with psychological components in the illness, in fact to all patients without serious organic illness. This graduate is disturbed that functional illness will form a large part of later practice. He is not interested in psychiatric patients. He decidedly does not want to become a psychiatrist. He disclosed that he found difficulty in establishing comfortable relations with patients. A possible factor which made him enter medical school is that his father's education continued beyond the age of 16. The father may have been a professional man and this type of student may have entered medicine to maintain a family tradition.

The chief distinction between these two types of organic graduate is that one is comfortable with people and does not have animosity to psychologically-affected patients: instead he detaches himself from them without any censure. The other organic graduate actively dislikes and is discomforted by patients with psychogenic aspects in the illness.

The pair of graduates who are psychologically orientated also are distinctly different.

3. The research-orientated graduate is not concerned about later income; his father did not have schooling beyond 16 years. In the examination in psychiatry he performed excellently. He showed initiative in seeing psychiatric patients for himself—not a required part of the psychiatry course. He expects to derive his career satisfactions from

*Discussion of the four mirror-delegates is omitted for the sake of brevity.

opportunities for research and from performing skilled clinical techniques. He was not troubled by examination anxiety, resembling the 'adequate' graduate in this; he performed well in a number of his professional examinations. He conveys high intellectual interest in psychiatry; he did exceptionally well in the oral and written parts (but not the clinical part) of the psychiatry professional examination.

4. The second psychologically-orientated student was different in that his acceptance of psychogenic illness was based not upon intellectual and research interest, but derived from his strong motive for helping patients. He is the *patient-centred* graduate. He was critical that students had to go without seeing patients during the pre-clinical years. He was considering a career in psychiatry for himself. He was much concerned that he might err in later practice by not responding with proper concern to patients' needs. He was the graduate who came to the medical school from a Scottish background.

To discover whether such attitudes are reflected in later medical work, students have to be followed up until they are established professionally. But some information can be got by investigating experienced doctors, to see how personality differences among them influence their professional style.

General practitioners with psychological interests

To study the characteristics of a psychological orientation in experienced doctors, general practitioners attending a postgraduate course in psychiatry were investigated by means of two attitude questionnaires, the first administered before they arrived and the second after they had completed the course and were once more back in their practices. In addition these doctors were asked to complete two personality inventories (Walton 1965).

The assumption was that these doctors would prove psychological in orientation: having decided to attend a psychiatric course lasting a week it could be expected of them that they not only regarded psychological factors as important, but also considered them of as great interest as the organic factors in illness. The expectation was confirmed. Of the 35 doctors, all except five were psychological in orientation. They said they were as interested in psychological as in organic aspects of illness. Only five said they were more interested in organic aspects of illness.

The doctors were clear why they came to the postgraduate course. This was primarily to learn the skills by which patients can be enabled to talk about emotional problems. Their second preference was for teaching about psychotropic drugs. Discussion of the basis and method of referral of patients for psychiatric consultation was the least favoured of the three objectives suggested as possible topics on which the course might focus. The impression they gave was that they came on the course for a technical reason, to increase their clinical effectiveness. Their purpose was vocational.

In the intake questionnaire sent to practitioners, five different motives for attending were suggested and the doctors were asked to rate on a five-point scale the extent to which each reason applied in their own case. They were unanimous about one goal. They came for instruction to improve their clinical competence to manage patients already on their lists. It was this immediate practical motive which evoked complete assent. The motive next in prominence was an interest in psychology and current knowledge about behaviour, a goal similar to that labelled 'psychodynamic information' in the investigation of lecturers' goal attitudes. Only some doctors stated that they had applied to attend because they felt inadequate in diagnosing psychiatric illness. Only a third said they planned to extend their working range to treat a greater number of psychologically-ill patients. They were quite explicit that they were not interested in psychiatry as a specialty. In sum, doctors who exert themselves to obtain further psychiatric instruction do so because of immediate practical clinical considerations, concerning patients for whom they are currently responsible. It is not specialist psychi-

atry they come to learn, but the knowledge and the techniques relevant in general practice. Some proved sternly critical of teaching which did not take account of the contemporary conditions of general practice.

These practitioners specified which types of psychiatric patient they accept as their clinical responsibility by ranking the types of psychiatric problems in general practice. Some are generally accepted as valid clinical responsibility, others are not. This is the more interesting because these doctors are actively concerned about psychological illness, to the extent of seeking active training to increase their psychiatric skills.

Like medical students, these experienced doctors accept with little reservation that they have responsibility towards psychosomatic and psychoneurotic patients. Rejection starts to be apparent in the case of patients who are unco-operative, and of patients whom the doctor comes to dislike. (They showed no awareness of the potential treatment value of critical responses from patients, or that the doctor should explore his own reactions concerning those patients to whom he reacts with animosity. No recognition was conveyed that the doctor himself may contribute to produce troublesome behaviour in patients).

Patients who become emotionally dependent on the doctor are seen by these practitioners as a clinical burden whom few will want to treat; alcoholics are a category of patient who are not acceptable to half of these manifestly responsive doctors. Suicidal patients, understandably, these practitioners want to hand to others for treatment. The type of patients least acceptable to them are psychotic patients. Only a tenth of the doctors will treat psychotics. Instruction in psychiatry could aim to develop the considerable contribution which general practitioners are uniquely equipped to make in the management of psychotic patients, but which only a small minority exert themselves to provide (Parkes 1962).

A personality test can select, in advance of the actual teaching, the doctors upon which the course will have most impact. These are the thinking-introverts, those who score highest on an inventory which measures the degree of reflectiveness in a person's orientation. These thoughtful doctors, who are interested in literature and art, who have a liking for abstract, rather than practical, ideas, are serious-minded and disinclined to pass judgements on others; they are those who return to practice considering that the course changed their approach to patients, stating that they have altered their former view about psychiatry. These thinking-introverts also indicate that they plan to increase the amount of psychiatric work they undertake. The low scorers, the thinking-extroverts, doctors who are distinguished by a preference for action rather than thought, who value mainly ideas which have practical application, do not report such changes in professional attitude on return to practice.

Teachers need greater awareness of the differences between doctors if postgraduate medical education is to become a more rewarding activity. Courses which aim merely to convey factual knowledge have proved a "repeated disheartening failure . . . to alter substantially the behaviour of practitioners." (Miller 1967).

General practitioners selecting themselves for training in psychiatric methods are often too disabled by their personality make-up to benefit from the training (Balint *et al.* 1966). It is likely that better results will follow if teaching is geared to the individual attributes of doctors.

Physical-mindedness versus psychological-mindedness

Some doctors describe themselves as frankly uninterested in psychological and social factors in illness. Others say they are interested, and then there are those who demonstrate by their behaviour that they are interested.

An investigation was carried out to explore the personality differences among doctors

of these three types: 82 doctors attending postgraduate courses at Edinburgh University were given two personality tests. The aim of the study was to determine if an organic orientation is related to a tendency in a person to want things cut-and-dried, or to a tendency to prefer practical ideas and display impatience with abstract ideas (Walton 1966).

The tests used were the Complexity and the Thinking-introversion Scales (Centre for the Study of Higher Education 1962).

(a) *Complexity* is measured by a scale of 27 items. Examples of items rejected by the complex person are:

(i) Usually I prefer known ways of doing things, rather than trying out new ways.
(ii) For most questions there is just one right answer, once a person is able to get all the facts.
(iii) I don't like to undertake any project unless I have a pretty good idea how it will turn out.

The person scoring high on this test (*i.e.* rejecting items such as the above) is flexible, experimental and comfortable in ambiguous situations. Those who obtain low scores prefer conditions of sameness, and are not comfortable under conditions of uncertainty. Such conditions are not always avoidable in practice, the doctor often having to advise patients or initiate treatment before the basis of an illness can be diagnosed with certainty. The mean complexity score of the practitioners was 10.5, standard deviation 6.0. The doctors resembled classes of senior medical students whose mean score was 11.8.

(b) *Thinking-introversion* was the other personality dimension measured in the practitioners. It is evaluated by an inventory of 67 items. A person who obtains a high score will agree with items such as these:

(i) I study and analyse my own motives and reactions.
(ii) When I go to a strange city I visit museums and galleries.

Among the items he rejects is this: "I am more realistic than idealistic, that is, more occupied with things as they are than with things as they should be."

A high scorer, therefore, has a liking for reflective thought, particularly of a more abstract nature. In contrast, the thinking-extrovert, a low scorer on the dimension, shows preference for practical ideas, and a liking for overt action. He adheres more to generally-accepted ideas than the introvert. The mean score of the practitioners was 33.7, standard deviation 9.4. On this second personality dimension also the doctors resembled senior medical students, whose mean score was 35.8.

Length of time in practice was recorded, as was the sex of the doctor, because these factors seemed likely to have some influence on professional orientation. There is evidence that doctors' work falls in quality as they age (Peterson *et al.* 1956) and that older doctors make less use of laboratory facilities (Morrison and Riley 1963). The doctors had qualified on an average $18\frac{1}{2}$ years previously, most having graduated between 10 and 27 years earlier.

The finding from this investigation was that doctors who say they are interested resemble closely doctors who demonstrate by their actions that they are interested; these two groups differ significantly from the doctors who describe themselves as physically-orientated.

The first trait explored, flexibility of outlook with the capacity to accept conditions of uncertainty, did not differentiate the two types of doctor. One can be physical or psychological in orientation and at the same time be either tolerant or intolerant of ambiguities.

The second trait explored, reflectiveness, differentiates the two types of doctor.

Practitioners who are physically-minded are also less reflective and less interested in abstract ideas.

Effect of age and personality on doctor's clinical preferences

A further analysis was carried out to study the effect of personality on the clinical preferences of doctors, and the effect of ageing on style of practice (Walton and Hope 1967). The finding was that the clinical interests of general practitioners on postgraduate courses vary with age and personality type. Both the length of time a doctor has been in practice and a personality trait influences his clinical style.

Of the two personality dimensions measured, the more important is 'complexity', the practitioners' response under conditions of ambiguity. The doctors who do not mind conditions of uncertainty differ in their clinical preferences from those who are intolerant of ambiguities and prefer to seek closure instead. Older doctors are less interested in providing continuous care for patients over a prolonged time than younger doctors.

Most variation in the sample is accounted for by two contrasting sub-groups among the practitioners. The older doctors who are high in 'complexity' treat neurotic patients, hold psychotropic drugs in relative disfavour, and do not care to provide prolonged care for patients. Those younger doctors who by temperament prefer conditions of certainty do not treat neurotics, but they do treat psychotic patients, they favour the use of psychotropic drugs, and they are interested in providing patients with management over a time.

Whether or not younger doctors favoured drug treatment of psychological disorder proved not to be a function of age but of their personality. The doctors who most favour drugs are those least tolerant of conditions of uncertainty.

Doctors who are physically-orientated, therefore, predictably are more impatient with abstract ideas than doctors who are psychologically-orientated. On the other hand, to understand the main differences in clinical style operating in a group of doctors, attention should be paid to a different trait, the doctor's degree of reflectiveness; age also affects clinical style. We can look to future studies of doctors' professional behaviour to go beyond these findings and thereby enlarge our knowledge of the relationship between personality and clinical preferences.

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Community psychiatric services and the general practitioner

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It is the general practitioners who are experienced in providing medical services in the community; psychiatrists have only recently ventured beyond the hospitals' boundaries. Never-the-less, community psychiatric services are something of an innovation to both you and me, and my excuse for being the speaker is that my research unit has been interested in their evaluation. To get the problem into perspective, it is first worth seeing how the care of mental illness in a community is divided between general practitioners and the psychiatrists.

Professor Shepherd and his colleagues (1966) have estimated the prevalence and inception rates of psychiatric illness in 46 London practices, which they did by taking a 12 per cent random sample of the practice-populations. They reported an annual prevalence rate (that is the number of patients consulting with psychiatric illness per 1,000 patients at risk) of 140 per 1,000; the inception rate for the population (that is new cases of illness consulting during one year) was 52 per 1,000. This important study is the most thorough attempt so far made in Britain to assess the amount of psychiatric illness for which the local services must provide. A difficulty in any survey of this sort is the definition of psychiatric morbidity. The method Shepherd used was to include a case if the general practitioner's diagnosis was listed in Section V of the I.C.D., or if the general practitioner considered the illness had an important psychological component. With this classification Shepherd obtained the following diagnostic rates: six per 1,000 for psychoses, 88 for neuroses and 46 for psychosomatic disorders. Chronic cases, defined as those whose illness had a duration of at least one year, accounted for over half of the morbidity. A practice of 2,000 will, therefore, be caring for about 280 psychiatric patients during any year, 140 of whom will have been ill for more than a year, and about 100 will be new cases. What proportion of them does the general practitioner refer to the psychiatric services? Shepherd found that only 3.5 per cent of